

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim11-14 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim11, a data recording medium for storing AV data as recited in claim11 is non-statutory subject matter.

Claim 12 and 13 is drawn to a “program” *per se* as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a.

Regarding claim14, a recording medium for storing a program as recited in claim14 is non-statutory subject matter.

Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus

statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim1-4, 6-15, 17-19 is rejected under 35 U.S.C. 102(e) as being anticipated by Sugahara et al (Pub No US 2003/0103766).

Regarding claim1,4,8,9, 11-14,18, Sugahara et al (hereinafter Sugahara) anticipates a method for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be reproduced in synchronism with the AV data, the method comprising: a first step of dividing the AV data into partial AV data

based on a unit that the AV data is synchronized with the associated data, and of dividing the associated data into partial associated data based on a unit that the associated data is synchronized with the AV data (see paragraph 0075 and figure 7 102a); a second step of securing, in the recording medium, a first continuous region for continuously storing a the partial AV data and the partial associated data; which are to be synchronized with each other ; a third step of continuously recording the partial AV data and the partial associated data onto the first continuous region (see paragraph 0080); and a fourth step of recording, onto the recording medium, file system management information for (i) managing the partial AV data and the partial associated data as different files, and (ii) managing information for handling the partial AV data and the partial associated data as the different files(see paragraph 0098 and figure 8).

Regarding claim 2, Sugahara anticipates the method as set forth in claim 1, further comprising: a fifth step of recording, onto the recording medium, (i) reproduction start time of the partial AV data, and (ii) correspondence information of the partial AV data and the partial associated data, both of which are disposed in the first continuous region (see paragraph 0075-0076).

Regarding claim 3, 7, Sugahara anticipates the method as set forth in claim 1, further comprising: a sixth step of recording, onto the recording medium, information indicating whether or not the partial associated data is recorded adjacent to the corresponding partial AV data (see paragraph 0102- 0103 , address).

Regarding claim6, Sugahara anticipates the method as set forth in claim 4, further comprising: an eighth step of recording, onto the recording medium, (i) reproduction start time of the partial AV data, and (ii) correspondence information of the partial AV data and the partial associated data, both of which are disposed in the first continuous region (see paragraph 0093-0094).

Regarding claim10, Sugahara anticipates the AV data recording apparatus as set forth in claim 9, further comprising: means for dividing, during the recording of the associated data, the associated data into partial associated data in accordance with a predetermined interval (see figure7 102a) ; means for recording, during the recording of the associated data, the partial associated data onto the second region which that is stored in continuity with relevant partial AV data (see figure 7 107-108); and means for recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the partial associated data as a different from respective files of the partial AV data and the second region, and (ii) managing information for handling the partial associated data as a different from respective files of the partial AV data and the second region (see figure 7 107-108; paragraph 0098).

Regarding claim15, 17, Sugahara anticipates the AV data recording apparatus as set forth in claim 9, comprising: means for recording the associated data onto the

second region that is stored in continuity with relevant partial AV data; and means for recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the associated data as a file different from respective files of the partial AV data and the second region, and (ii) managing information for handling the associated data as a file different from respective files of the partial AV data and the second region (see figure7 and 8).

Regarding claim19, Sugahara anticipates the method as set forth in claim 1, wherein: the partial AV data is constituted by the integral number of individually reproducible units (see paragraph 0070).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara et al (Pub No US 2003/0103766).

Regarding claim16, see the teaching of Sugahara above. Sugahara does not teach determining size of second region in consideration of occurrence of a defect.

However it is old and well known in the art determining size (capacity) inconsideration of a defect. Therefore official notice is taken.

One of ordinary skill in the art at the time the invention was made would have been motivated to determine size (capacity) of a medium inconsideration of a defect because it would make defect management more effective.

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Allowable Subject Matter

Claim 5, 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIRUMSEW WENDMAGEGN whose telephone number is (571)270-1118. The examiner can normally be reached on 7:30-5:00, M-F, all Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

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